

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A substrate, suitable for the preparation of a composite membrane, which substrate comprises a porous non-woven sheet of fibres, ~~characterised in that wherein~~ the fibres comprise ~~mixed amorphous silica fibres a mixture of micro-fine amorphous silica fibres and one or more chopped strand(s) of amorphous silica that are bound and the fibres are bound with a binder.~~

2.-3. (Canceled)

4. (Currently Amended) A substrate according to claim 1, wherein the ~~amorphous silica fibres comprise a mixture of both~~ comprises microfibres and chopped fibres in the range of from 95:5% to 5:95% by weight of the mixture respectively.

5. (Currently Amended) A substrate according to claim 4, wherein the ~~amorphous silica fibres comprise a mixture of both~~ comprises microfibres and chopped fibres in the range of from 70:30% to 30:70% by weight of the mixture respectively.

6. (Previously Presented) A substrate according to claim 1, wherein the fibres have a diameter in the range of from 0.1 μ m to 50 μ m.

7. (Previously Presented) A substrate according to claim 6, wherein the fibres have a diameter in the range of 0.4 μ m to 9 μ m.

8. (Previously Presented) A substrate according to claim 1, wherein the binder comprises a solution or dispersion of ion-exchange polymeric materials, non-ion-conducting polymers, or inorganic materials or mixtures thereof.

9. (Previously Presented) A substrate according to claim 1 for use in the preparation of a composite membrane.

10. (Currently Amended) A composite membrane comprising a porous substrate of fibres and at least one ion-conducting polymer, ~~characterised in that~~ wherein the substrate comprises a porous non-woven sheet of ~~mixed amorphous silica fibres~~ a mixture of micro-fine amorphous silica fibres and one or more chopped strand(s) of amorphous silica and the fibres are bound with a binder.

11. (Previously Presented) A composite membrane according to claim 10, which when dried then boiled in water undergoes less than or equal to about $\pm 9\%$ change in the area.

12. (Previously Presented) A composite membrane according to claim 10, wherein the total thickness of the membrane is less than 200 μm .

13. (Previously Presented) A composite membrane according to claim 10 for use in a fuel cell.

14. (Currently Amended) A process for the manufacture of a substrate, comprising the steps of

- (a) dispersing ~~mixed amorphous silica fibres~~ a mixture of micro-fine amorphous silica fibres and one or more chopped strand(s) of amorphous silica in water to form a slurry;
- (b) depositing the slurry onto a mesh bed to form a fibre network;
- (c) drying and compacting the fibre network; and
- (d) applying, before or after step (c), a dispersion of binder.

15. (Previously Presented) A process for the manufacture of a membrane, comprising the steps of

- (i) forming a porous substrate according to claim 14; and thereafter,
- (ii) impregnating the porous substrate with a polymeric material to produce a membrane.

16. (Previously Presented) A process according to claim 15, wherein step (ii) is carried out by nip roller coating of the substrate to fill it with a solution of ion-conducting polymeric material, and further compaction and drying of the membrane.

17. (Previously Presented) A membrane electrode assembly comprising a composite membrane according to claim 10.

18. (Previously Presented) A fuel cell comprising a composite membrane according to claim 10.

19. (Currently Amended) A process according to claim 15, wherein ~~mixed amorphous silica~~ the fibres are randomly oriented in said porous substrate.

20. (Canceled)

21. (New) A substrate according to claim 1, wherein the fibres are randomly oriented.